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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,660	02/14/2002	Euljoon Park	A02P1016US01	2963
36802	7590	09/24/2004	EXAMINER	
PACESETTER, INC. 15900 VALLEY VIEW COURT SYLMAR, CA 91392-9221			BRADFORD, RODERICK D	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/077,660	Applicant(s) PARK ET AL.	
	Examiner Roderick Bradford	Art Unit 3762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 December 2003.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 5-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 14-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \*   c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |  |
|--|--|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</p> <p>6) <input type="checkbox"/> Other:</p> |
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## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on June 23, 2004 has been entered.

### ***Response to Arguments***

2. Applicant's arguments June 23, 2004 have been fully considered but they are not persuasive.

In the abstract of the Bonnet reference, Bonnet states that device determines the patient's activity according to predetermined criteria, such that the increased pacing rate is provided only during a sleep phase and otherwise inhibited. Therefore the rejection is maintained.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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4. Claims 1, 2, 4 and 14-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bonnet et al. U.S. Patent No. 6,574,507.

Referring to claims 1 and 14, Bonnet discloses an implantable cardiac stimulation device for stimulating the heart comprising:

- a physiological sensor that is capable of sensing a physiological parameter and generating corresponding signals (column 4, lines 5-10)
- one or more pulse generators that are capable of generating cardiac pacing pulses (abstract)
- circuitry connected to the sensor that is operative to detect one of a resting and a sleep condition based (column 5, lines 1-7) on the signals and that is responsive to detection of one of a resting condition and a sleep condition to control the one or more pulse generators to pace the heart at a sleep apnea prevention rate (abstract) for so long as one of the resting condition and sleep condition continues (abstract).

Referring to claim 2, further comprising a controller coupled to the one or more pulse generators and to the physiological sensor, the controller comprising an executable control logic that distinguishes between a sleeping condition and a waking condition of a patient and controls the one or more pulse generators to pace at a sleep apnea prevention rate in response to detection of a sleeping condition (column 4, lines 5-10).

Referring to claims 4 and 17, a physiological sensor that measures physical motion for derivation of an activity parameter and an activity variance parameter, and

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activates sleep apnea preventive pacing when the activity and the activity variance signals indicate a sleeping condition (column 4, lines 54-67).

Referring to claim 15, wherein the means for detecting a potential sleep apnea condition comprises means for detecting a sleep condition (column 4, lines 48-49).

Referring to claim 16, further comprising means for distinguishing between a sleeping condition and a waking a condition of a patient (column 5, lines 1-6).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claim 3 rejected under 35 U.S.C. 103(a) as being unpatentable over Bonnet et al. U.S. Patent No. 6,574,507 in view of Bourgeois et al. U.S. Patent No. 6,126,611.

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Referring to claim 3, Bonnet fails to further comprise one or more sensors capable of electric coupling to the cardiac tissue and including an executable control logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate, the executable control logic being capable of distinguishing between a sleeping condition and a waking condition and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition. However, Bourgeois discloses one or more sensors capable of electric coupling to the cardiac tissue (column 4, lines 1-9) and including an executable control logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate (column 5, lines 62-65), the executable control logic being capable of distinguishing between a sleeping condition and a waking condition (column 5, lines 65-67 and column 6, lines 1-4) and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition (column 6, lines 30-39) as a means to ensure proper detection of the state of the patient.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the teachings of Bonnet to include one or more sensors capable of electric coupling to the cardiac tissue and including an executable control logic that controls the one or more pulse generators to pace at a rate selected from among at least a sleeping rate, resting rate and an exercise rate, the executable control logic being capable of distinguishing between a sleeping condition and a waking

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condition and controlling the one or more pulse generators to pace at a rate greater than the resting rate in response to detection of a sleeping condition, as taught by Bourgeois, as a means to ensure proper detection of the state of the patient.

***Allowable Subject Matter***

8. Claims 18-21 are allowed.

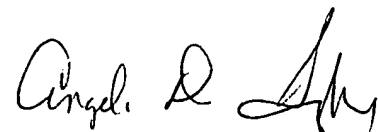
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roderick Bradford whose telephone number is (703) 305-3287. The examiner can normally be reached on Monday - Friday 7 a.m. - 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (703) 308-5181. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

R.B.



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